INTERNATIONAL BASE LINE DATA CODING SYSTEM

INTRODUCTION

PURPOSE: This outline is the TSNL categorization system for storage, retrieval, and interrelation of information drawn from a broad range of sources.

STORAGE AND RETRIEVAL: Since data may apply to more than one topic heading, it can be stored under all relevant topic headings and retrieved from any one of them. All data under a single topic can be retrieved by recalling that topic. By recalling two topics, only that information recorded under both topics (i.e., at their intersection) will be displayed. This information at the intersection of two or more topics will show relationships between outline factors.

GEOGRAPHICAL PLACEMENT: When available, information will be assigned geographical designations according to place names listed in an appendix. This assignment can be assumed where it is not specifically noted within an outline section.

INVENTORY AND DISTRIBUTION: The relationship between geographical location and any other outline category can be displayed in two ways. Either all references to a place (such as the soil types of a county) or all distributional information for a topic (such as the county distribution of a particular soil type) can be retrieved.

BIBLIOGRAPHY: All entries will be carefully referenced, and a source bibliography for any outline topic (or intersection of topics) will be available. A reference is stored under all relevant topic headings, not merely by title or key words as currently provided by most abstract services.

<u>APPLICATIONS:</u> This system is intended for use by researchers, managers, and planners in academic institutions, industry, and government. In addition to primary uses for teaching and research, it can facilitate the preparation and evaluation of impact statements and management decisions, ease time consuming literature searches, and provide inspiration for further research. Although not a model, this system is designed to provide an adequate data base and base line framework for modelers.

FEATURES: There are a number of advantages to this coding system. One is its design in outline form, implying relationships between factors, rather than as a simple list. Further detail can be developed as necessary. Also, the outline can supplement or interface with such diverse data systems as the Texas Natural Resources Information System or the United Nations Environmental Program. Unlike most other data systems, man is treated in the biological section.

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TEXAS SYSTEM OF NATURAL LABORATORIES, INC.

INTERNATIONAL BASE LINE DATA CODING SYSTEM (IBLDCS)

TSNL's Master Outline (IBLDCS) is summarized here to the first three levels only to provide an overview of its scope. In its complete form some sections are subdivided down to 10 levels. It is designed so that further detail can be added on the lower levels to accommodate specific research and data storage needs.

A. BASE INFORMATION: PHYSICAL ASPECTS

- I. METEOROLOGICAL
 - A. Climatic belts
 - B. Wind
 - C. Precipitation
 - D. Temperature
 - E. Evapotranspiration rate

 - F. Solar radiation G. Ultra-violet radiation
 - H. Visible haze
 - I. Photosynthesis
 - J. Climatic changes
 - K. Extraordinary weather events

II. HYDROLOGICAL

- A. Drainage Basin
- B. River or stream reach
- C. Water impoundments
- D. Aquifers/ground water
- E. Estuary/bay system

III. GEOLOGICAL

- A. Stratigraphic
- B. Structural
- C. Paleontological D. Geomorphological
- E. Economic F. Environmental

IV. PEDOLOGICAL

- A. Classification
- B. Geographical distribution
- C. Description
- D. Use capability

V. CHEMICAL

- A. Nitrogen cycle
- Phosphorus cycle
- C. Carbon cycle
- D. Other geochemical cycles
- E. Dissolved oxygen aquatic F. Chemical oxygen demand aquatic
- G. Biochemical oxygen demand aquatic
- H. Atmospheric gases
- I. Total particulates
- J. Common elements
- K. Trace elements
- L. Heavy metals
- M. Radioactive substances
 N. Herbicides and pesticides
 O. Petroleum

B. BASE INFORMATION: BIOLOGICAL ASPECTS

I. TAXONOMIC CLASSIFICATION

- A. Viruses
- B. Superkingdom Prokaryonta

Kingdom 1. Monera

C. Superkingdom Eukaryonta

Kingdom 1. Myceteae Kingdom 2. Plantae (Phyta) Kingdom 3. Animalia (Zoa)

II. ECOLOGICAL CLASSIFICATION

- A. Evolutionary history
- Distribution
- c. Habitat
- D. Abiotic interactions
- E. Biotic interactions
- F. Biotic/cultural interactions
- G. Cultural interactions

APPENDIX A: CAPITAL RESOURCES INVENTORY

- I. Natural resources
 - A. Air
 - B. Water
 - C. Land
 - D. Biological
- E. Energy

II. Utilization of resources

- A. Agriculture, forestry and fishing
- B. Mining
- C. Construction
- D. Manufacturing
- E. Transportation, communications, electric, gas, and sanitary services
- F. Wholesale trade
- G. Retail trade
- H. Finance, insurance, and real estate
- I. Services J. Public administration
- K. Nonclassifiable establishments

III. Limiting factors

- A. Natural pressures
- B. Man-made pressures IV. Educational resources
 - A. Research resources
 - B. Researchers

APPENDIX B: MANAGEMENT CONCERNS

C. Research reports

D. Bibliography of sources

- I. Managerial interests by industry
 - A. Industrial
- B. Public administration II. Activities (impacts)
- III. Managerial considerations by category
 - A. Organism B. Environment
 - C. Physical description